

Recorded water levels in this bulletin are derived from a representative network of water level gages on each lake (see cover map). Providers of these data are the National Ocean Service, National Oceanic and Atmospheric Administration, U.S. Department of Commerce, and the Integrated Science Data Management, Department of Fisheries and Oceans, Canada. Historic and projected lake levels are derived by the Detroit District, U.S. Army Corps of Engineers and Environment Canada, under the auspices of the Coordinating Committee on Great Lakes Basic Hydraulic and Hydrologic Data.

This bulletin is produced monthly as a public service. Tables of possible storm-induced rises at key locations on the Great Lakes are available on request. The Corps also publishes the "Great Lakes, Connecting Channels and St. Lawrence River Water Levels and Depths," twice monthly, which provides a forecast of depths in the connecting rivers between the Great Lakes and the International Section of the St. Lawrence River. These publications can be obtained free of charge by writing to the address shown on the front cover, or by calling (313) 226-6441. Notices of change of address should include the name of the publication(s). All of these publications can be accessed on the Internet at <http://www.lre.usace.army.mil/glhh>.

## Great Lakes Basin Hydrology May 2011

Lake Superior received below average precipitation in May, while Lake Michigan-Huron saw near average precipitation. Lakes Erie and Ontario experienced well above average precipitation last month, with Lake Erie experiencing two times its average in May. Over the past 12 months, precipitation on all of the lakes has been above average. In fact, Lakes Erie and Ontario have seen precipitation that is over 20% above average over the past year. The net supply of water to all of the Great Lakes was above average in May, with Lakes Erie and Ontario receiving more than twice their average. The tables below list May precipitation, water supply, and outflow information for the entire Great Lakes basin.

A comparison of May monthly mean water levels to long-term (1918-2010) averages show that Lakes Superior and Michigan-Huron were 13 and 15 inches, respectively, below average. Lakes St. Clair, Erie, and Ontario were 1, 6 and 9 inches above average, respectively.

PRECIPITATION (INCHES)								
BASIN	May				12-Month Comparison			
	2011	Average (1900-2008)	Diff.	% of Average	Last 12 Months	Average (1900-2008)	Diff.	% of Average
Superior	2.53	2.77	-0.24	91	33.38	30.51	2.87	109
Michigan-Huron	3.10	3.05	0.05	102	37.46	32.44	5.02	115
Erie	6.74	3.35	3.39	201	45.06	35.40	9.66	127
Ontario	4.34	3.11	1.23	140	41.79	35.71	6.08	117
Great Lakes	3.59	3.01	0.58	119	37.89	32.64	5.25	116

LAKE	May WATER SUPPLIES <sup>1</sup> (cfs)		May OUTFLOW <sup>2</sup> (cfs)	
	2011	Average <sup>4</sup> (1900-2008)	2011	Average <sup>3</sup> (1900-2008)
Superior	203,000	182,000	55,000	75,000
Michigan-Huron	337,000	251,000	168,000	189,000
Erie	132,000	48,000	227,000	216,000
Ontario	127,000	60,000	274,000	260,000

Notes: Values (excluding averages) are based on preliminary computations. CFS denotes cubic feet per second.

<sup>1</sup> Negative water supply denotes evaporation from lake exceeded runoff from local basin.

<sup>2</sup> Does not include diversions.

<sup>3</sup> Niagara and St Lawrence rivers average outflows are based on period of record 1900-1989 and 1900-2005, respectively

<sup>4</sup> Lakes Erie and Ontario average water supplies based on 1900-1989